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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,412	11/08/2001	Masahisa Ikeda	PF-2905/NEC/US	5252

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RESTON, VA 20190

EXAMINER

PEACHES, RANDY

ART UNIT	PAPER NUMBER
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2686

8

DATE MAILED: 04/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/986,412

Applicant(s)

IKEDA, MASAHIKA

Examiner

Randy Peaches

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3, 5, 6, 7/2-28-02</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Priority

Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a translation of the foreign application should be submitted under 37 CFR 1.55 in reply to this action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. ***Claims 1, 4, 6-9*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Imamatsu (U.S. Patent Number 6,687,901 B1) in view of Heidari (European Patent Number EP 0 802 694 A2).

Regarding ***claim 1***, Imamatsu teaches in columns 1 and 3 lines 7-14 lines 30-66, of a method of updating software, which reads on claimed "program", in a terminal device (200) where the said terminal device (200) is connected mutually to the base station (400) (see column 16-20) and if the transmission of the said software is interrupted due to a disconnection between them, the a check sum is performed in the downloading buffer for errors, and if verified the downloading

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operation should resume from the interrupted point, as disclosed in column 15 lines 30-55.

However, Imamatsu does not disclose transmitting the said downloaded software from the said base station to the said terminal device.

Heidari teaches in column 2 lines 13-18, 25-30, of transmitting programs from the said base station to the mobile telephone.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Imamatsu (U.S. Patent Number 6,687,901 B1) and Heidari (European Patent Number EP 0 802 694 A2) in order to obtain a method to retransmit an update program to a said terminal device from a said base station.

Regarding **claims 4 and 8**, as the above combination of Imamatsu (U.S. Patent Number 6,687,901 B1) and Heidari (European Patent Number EP 0 802 694 A2) are made, combination according to **claims 1 and 6**, further discloses, as taught by Imamatsu in column 12 lines 37-45, where after the completion of the said download of the update software, a check sum is used to search for any data errors, which reads on claimed "test".

Regarding **claim 6**, Imamatsu teaches of a terminal device (200) including:

- a buffer memory (206), which reads on claimed "receiving unit", for receiving the update software transmitted. See column 3 lines 30-34, 57-64.

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- a CPU (201), which reads on claimed "updating unit", for storing said update software and updating corresponding parts in the present control software, which reads on claimed "existing program", with the said update software. See column 3 lines 56-64.
- a battery back-up RAM (34), which reads on claimed "re-starting unit", for re-starting transmission process of the remaining non-transmitted parts of the said update software (see column 15 lines 40-56), after it is verified that the said terminal device (200) is not in waiting state. See column 9 lines 11-15.

However, Imamatsu does not disclose transmitting the said downloaded software from the said base station to the said terminal device.

Heidari teaches in column 2 lines 13-18, 25-30, of transmitting programs from the said base station to the mobile telephone.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Imamatsu (U.S. Patent Number 6,687,901 B1) and Heidari (European Patent Number EP 0 802 694 A2) in order to obtain a method for a said terminal device to receive a said update program from a said base station and if an interruption occur during the transmission process, the remaining said update data is able to be re-transmitted from the interrupted point to the said terminal device without having to download the entire transmission block.

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Regarding **claim 7**, as the above combination of Imamatsu (U.S. Patent Number 6,687,901 B1) and Heidari (European Patent Number EP 0 802 694 A2) are made, combination according to **claim 6**, a battery back-up RAM (34), which reads on claimed "additional unit", which decides, as taught by Imamatsu in column 15 lines 40-47, the specific transmission block to start during re-downloading.

Regarding **claim 9**, as the above combination of Imamatsu (U.S. Patent Number 6,687,901 B1) and Heidari (European Patent Number EP 0 802 694 A2) are made, combination according to **claim 6**, further discloses, as taught by Imamatsu in FIGURE 4a, column 6 lines 1-14, a Flash ROM (33) for re-writing the present control software (43) into the new control software in the said terminal device (200). See column 6 lines 15-61.

2. Claims 2, 3, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imamatsu (U.S. Patent Number 6,687,901 B1) in view of Heidari (European Patent Number EP 0 802 694 A2) and in further view of Saito (U.S. Patent Number 6,658,247 B1).

Regarding **claim 2**, as the above combination of Imamatsu (U.S. Patent Number 6,687,901 B1) and Heidari (European Patent Number EP 0 802 694 A2) are made, combination according to **claim 1**, discloses, as taught by Imamatsu in column 15 lines 45-55, that the said updated software is divided into small sized

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transmission blocks, which reads on claimed "update data are divided into a plurality of data sets", and is transmitted accordingly.

However, the combination of Imamatsu (U.S. Patent Number 6,687,901 B1) and Heidari (European Patent Number EP 0 802 694 A2) fails to expressly disclose where in the said transmission blocks a plural of pointers are added.

Saito disclose in the Abstract and columns 6 and 7 lines 1-66 lines 1-25 of load counters "n" and bit counters "m", which reads on claimed "pointers", that are used to determine which block of transmitted data should be downloaded during re-transmission. This eliminates the unnecessary need to re-transmit the complete transmission block during re-transmission.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teachings of Imamatsu (U.S. Patent Number 6,687,901 B1) and Heidari (European Patent Number EP 0 802 694 A2) to further include Saito (U.S. Patent Number 6,658,247 B1) in order allow the system the capability to transmit the said transmission blocks according to the said load counter and bit counter, which identifies the download location of the transmission block in case of an abnormal situation occurring causing a retransmission of the information.

Regarding **claim 3**, as the above combination of Imamatsu (U.S. Patent Number 6,687,901 B1), Heidari (European Patent Number EP 0 802 694 A2) and Saito (U.S. Patent Number 6,658,247 B1) are made, combination according to **claim 2**, wherein, as taught by Saito in column 7 lines 8-25, that when an interrupt occurs

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the value of the load counter N, which reads on claimed "pointer" is stored. Thus when downloading resumes, the NEXT block is downloaded, base on the saved value of the said load counter. In conjunction with the said load counter, the said bit counter value is simultaneously saved, thus allowing the system to concurrently download from the NEXT data block. See column 7 lines 15-25.

Regarding **claim 5**, as the above combination of Imamatsu (U.S. Patent Number 6,687,901 B1), Heidari (European Patent Number EP 0 802 694 A2) and Saito (U.S. Patent Number 6,658,247 B1) are made, combination according to **claim 3**, further discloses, as taught by Imamatsu in column 12 lines 32-65, where when an error is detected during the said software update procedure, the system is operable to write or erase the contents of the ROM and the downloading process is retried to complete the update software procedure.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy Peaches whose telephone number is (703) 305-8993. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Randy Peaches
April 20, 2004

Marsha D. Banks-Harold
MARSHA D. BANKS-HAROLD
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